

Louisville and Jefferson County Metropolitan Sewer District 700 West Liberty Street Louisville Kentucky 40203-1911 502-540-6000 www.msdlouky.org

December 31, 2008

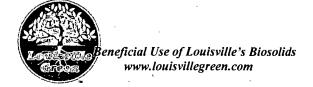
Mr. Femi Akindele Remedial Project Manager Kentucky/Tennessee Section U.S. Environmental Protection Agency Region IV 61 Forsyth Street Atlanta, GA 30303

Re: Result of Air Quality Monitoring - FY 09, Fourth Quarter (FY09-1Q), Lees Lane Superfund Site, Jefferson County, Kentucky, Administrative Order on Consent, USEPA Docket No-91-32-C

Dear Mr. Akindele:

In accordance with paragraph 11, under <u>Reporting Requirements</u>, of the subject Consent Order and Attachment 1, Operation and Maintenance Plan For Post-Removal Site Control at the Lee's Lane Landfill Site. Section 4.2, <u>Air Quality Monitoring</u>, attached for your information and files is one photocopy each of the following items, prepared by URS Corporation, 1600 Perimeter Park Drive, Suite 100, Morrisville, North Carolina 27560 and received by MSD on December 29, 2008.

- 1. URS Corporation letters dated December 22, 2008, 2 pages.
- 2. Figure 1, Lees' Lane Landfill, Sampling Locations, 1page.
- 3. Table 1, TO-15 Data Summary for Ambient Air Samples at the Lees' Lane Landfill, Sampling date: September 24, 2008, 1 page.
- 4. Table 2, On-Site Meteorological Data, Sampling date, September 24, 2008, 1 page.
- 5. Table 3, TO-15 Data Summary for Gas Monitoring Well Samples at the Lees' Lane Landfill, Sampling date: September 24, 2008, 1 page.





Mr. Femi Akindele December 31, 2008 Page 2

Please advise if you have any questions concerning the attached information.

Sincerely,

Richard H. Watkins, Sr.

Infrastructure Liaison

RHW/rw Lees-09-1Qtr

Enc.

cc: Kentucky National Resource Environment Protection Cabinet

Mr. Ken C. Logsdon, Division of Waste Management

H. J. Schardein, Executive Director

Michael Griffith Lees Lane File



URS Corporation 1600 Perimeter Park Drive Morrisville, North Carolina 27560 Telephone: 919.461.1100

Fax: 919.461.1415

31825450.00005

December 22, 2008

Mr. Rick Watkins Louisville Metropolitan Sewer District 3050 Commerce Center Place Louisville, KY 40211

Dear Rick:

Enclosed is the summary analytical report for the ambient air and gas monitoring well samples collected at the Lee's Lane Landfill site on September 24, 2008 (Quarter 44). Six ambient samples, along with all six (G1, G2, G3, G4, G5R, G5L) well samples and a Field Blank were taken.

A map of the site, labeled with the sample collection locations for your reference, is shown in Figure 1. Table 1 is a tabular summary of the ambient samples with the primary analytes required for submission to EPA. Benzene, methylene chloride, toluene, and xylenes were detected in small quantities in all ambient samples, uniformly higher than the April 2008 sampling event. Ambient methane remained similar to the April 2008 event.

The sampling locations were chosen based on a combination of prevailing on-site meteorology and accessible sites in the adjacent residential neighborhood per the standard sampling protocol. The meteorological conditions were moderate throughout the sampling day; warm (58-87 °F), mostly calm, with light wind from the south. The information displayed in Table 2 was obtained from the Louisville International Airport (Standiford Field) National Weather Service Station. The ambient air samples were collected in Summa canisters positioned 3-5 feet above ground level, integrated over an approximate 7-hour collection period.

The methane analysis was performed by GC/FID using a separate analytical system from the TO-15 analysis employed at STL in Austin. The TO-15 analytical methodology using Gas Chromatography/Mass Spectrometry (GC/MS) was employed. Samples were handled with standard laboratory chain-of-custody procedures. Sample canisters and flow controllers were cleaned and blanked using method TO-12 for total non-methane hydrocarbons prior to field deployment. All of the samples were successfully collected and analyzed for methane and the TO-15 target analytes. Quality control parameters of precision (repeatability) and spiking of surrogate compounds meet internal URS and project-required specifications.



Mr. Rick Watkins Page 2 December 22, 2008

The reliability of this data set can be characterized as good, based on the repeatability (analytical precision), surrogate spike recoveries, blank levels and the relatively few number of unresolved interfering peaks in the sample chromatograms. The September 24, 2008 field blank canister reported no positive hits other than the surrogate recoveries. The reported results have not been blank corrected in attached tables per our standard project procedure.

Table 3 is a tabular summary of the gas well samples with the primary analytes required for submission to EPA. Following field sample collection, well G-1 was sampled with a GA-90 analyzer to test for the presence of methane in the well. Methane was only detected in G1-R (the westernmost of the two well heads). Methane levels (699 ppmv) in G1-L were comparable to previous monthly samples. Well G-1 registered elevated levels of primary analytes (benzene and vinyl chloride) at 8.9 and 7.9 ppb respectively.

URS appreciates the opportunity to assist your staff with this project. Please advise me at (919) 461-1242 if you have any questions.

Sincerely,

Robert F Jongleux Project Manager

Enclosure

CC:

Lauren Housley, URS/LOU

Project File/Task 44

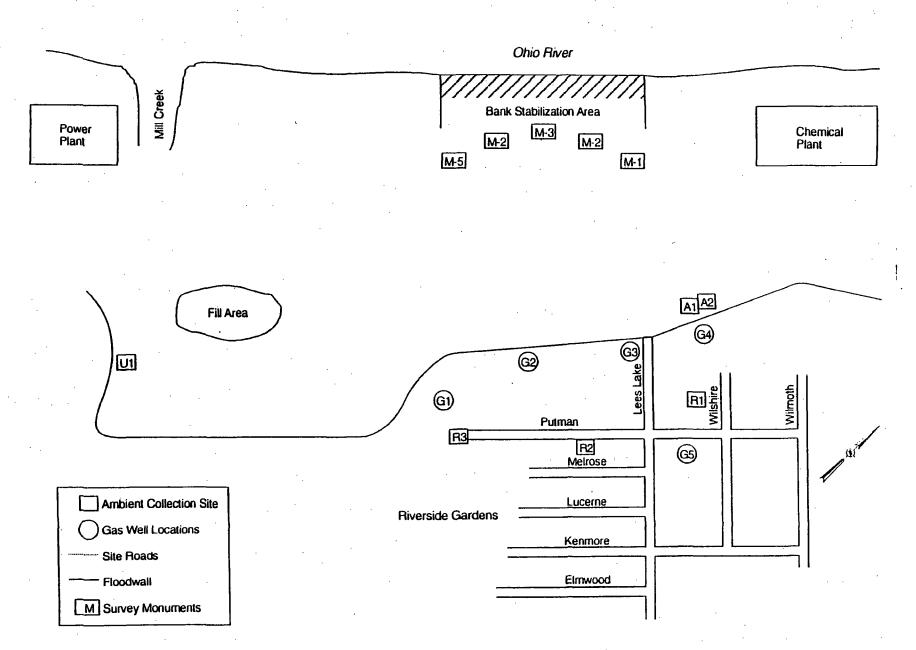


Figure 1. Lees Lane Landfill Sampling Locations

TO-15 DATA SUMMARY FOR AMBIENT

AIR SAMPLES AT THE LEE'S LANE LANDFILL SAMPLING DATE: 24 September 2008

TABLE 1

		Ambient Air Samples							
Sample ID	U1	A1	A2	R1	R2	R3			
Canister ID	RA2031	RA2034	RA2025	RA2030	RA2116	RA2035			
Dilution Factor	3.8234	2.8327	3.5856	2.7162	5.2679	5.5436			
Location	LG&E	ONSITE	ONSITE DUP	4423 WILSHIRE	<b>PUTNAM LANE</b>	<b>PUTNAM END</b>			
Veriflow ID	A218997	A181861	A168513	A134120	A218796	A181856			
Compound (ppbV)		<u> </u>							
Benzene	0.11	0.11	0.33	0.11	0.12	0.18			
Methylene chloride	0.09	0.11	0.11	0.07	0.07	0.07			
Toluene	0.60	0.61	1.15	0.58	0.67	0.89			
Vinyl chloride	ND	ND	ND	ND	ND	ND -			
Xylene (Total)	0.07	0.10	0.30	0.08	0.08	0.21			
Methane (ppmV)	3.82	3.81	3.42	3.04	3.14	3.73			

ND = Non Detect

TABLE 2

## LOCAL METEOROLOGICAL DATA AMBIENT AIR SAMPLES SAMPLING DATE: 24 September 2008

	Barometric		1	Wind	Wind	
	Pressure	Temperature	Dewpoint	Direction	Speed	
Time :	(in Hg)	(°F)	(°F)	(from)	(mph)	Observation
8:00 AM	30.32R	59	54	CALM	CALM	CLEAR
9:00 AM	30.32\$	65	56	CALM	CALM	SUNNY
10:00 AM	30.33R	71	54	CALM	CALM	SUNNY
11:00 AM	30.33\$	75	51	S	7	SUNNY
12:00 PM	30.32F	79	52	S	3	FAIR
1:00 PM	30.31F	83	51	CALM	CALM	SUNNY
2:00 PM	30.29F	85	51	VRB	6	SUNNY
3:00 PM	30.26F	86	50	NE	5G16	SUNNY
4:00 PM	30.23F	87	50	E	12	SUNNY
5:00 PM	30.22F	85	49	Ε	10	SUNNY
6:00 PM	30.228	84	51	NE	9	SUNNY

Source: National Weather Service, Louisville, Ky.

TABLE 3

TO-15 DATA SUMMARY FOR GAS MONITORING

SAMPLING DATE: 24 September 2008

	Well Samples						
Sample ID	G1	G2	G3	G4	G5-L	G5-R	BLANK #1
Canister ID	RA2029	RA2036	RA2028	RA2032	RA2115	RA2027	RA0898
Dilution Factor	2.7235	2.5838	2.629	2.7235	2.636	2.6502	2.7208
Orifice	RA2029	RA2036	RA2028	RA2032	RA2115	RA2027	N/A
Sampling Date	9/24/2008	9/24/2008	9/24/2008	9/24/2008	9/24/2008	9/24/2008	9/24/2008
Compound (ppbV)		-			•		
Benzene	8.93	0.08	0.02	0.09	0.15	0.10	ND
Methylene chloride	0.16	0.05	ND	0.03	0.06	ND	ND
Toluene	0.97	0.16	0.08	0.23	0.45	0.18	ND
Vinyl chloride	7.96	ND	ND	0.23	0.25	0.06	ND
Xylene (Total)	1.06	0.04	0.03	0.19	0.17	0.04	ND
Methane (ppmV)	699	2.90	1.41	1.26	3.36	1.87	ND

ND = Non-Detect